Docket No. 241266US0

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Kozo OCHI, et al.

SERIAL NO: New U.S. Application Attn: Application Branch

FILED: Herewith

FOR: MUTANT PSEUDOMONAS PUTIDA STRAINS AND METHODS OF USE THEREOF

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:
Applicant(s) wish to disclose the following information.

REFERENCES

☒ The applicant(s) wish to make of record the references listed on the attached form PTO-1449. Copies of the listed references are attached, where required, as are either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references.

☐ A check is attached in the amount required under 37 CFR §1.17(p).

RELATED CASES

☐ Attached is a list of applicant's pending application(s) or issued patent(s) which may be related to the present application. A copy of the patent(s), together with a copy of the claims and drawings of the pending application(s) is attached along with PTO 1449.

☐ A check is attached in the amount required under 37 CFR §1.17(p).

CERTIFICATION

☐ Each item of information contained in this information disclosure statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.

☐ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

DEPOSIT ACCOUNT

■ Please charge any additional fees for the papers being filed herewith and for which no check or credit card payment form is enclosed herewith, or credit any overpayment to deposit account number 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

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Form PTO 1449 (Modified)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO.	SERIAL NO.
		241266US0	New U.S. Application
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT	
		Kozo OCHI, et al.	
		FILING DATE	GROUP
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OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

	AAA	Rui CHEN, et al., "Crystallization and Further Characterization of Meta-Hydroxybenzoate 4-Hydroxylase From Comamonas Testosteroni", Research Communications in Biochemistry, Cell and Molecular Biology, Vol. 2, Nos 3 & 4, (1998), pp. 253-274
	AAB	Sonja ISKEN, et al., "Bacteria Tolerant to Organic Solvents", Extremophiles, Vol. 2, (1998), pp. 229-238
	AAC	Takayuki NISHIJYO, et al., "The CbrA-CbrB two-component regulatory system controls the utilization of multiple carbon and nitrogen sources in Pseudomonas aeruginosa", Molecular Microbiology, Vol. 40, No. 4, (2001), pp. 917-931
	AAD	Joseph G. LEAHY, et al., "Microbial Degradation of Hydrocarbons in the Environment", Microbiological Reviews, Vol. 54, No. 3, Sept. 1990, pp. 305-315
	AAE	Robert KUEHBERGER, et al., "Alteration of Ribosomal Protein L6 in Gentamicin-Resistant Strains of *Escherichia coli*. Effects of Fidelity of Protein Synthesis", L6 Mutations Alter Ribosomal Ambiguity, Vol. 18, No. 1, (1979), pp. 187-193
	AAF	Akira ISHIHAMA, et al., "Structural and Functional Modulation of *Escherichia coli* RNA Polymerase", Library of Congress Cataloging-in Publication Data, (1990), pp. 145-152
	AAG	Akira INOUE, et al., "A *Pseudomonas* thrives in high concentration of toluene" Nature, Vol. 338, 16 March 1989, pp. 264-266
	AAH	Mitchell SINGER, et al., "Genetic Evidence for the Interaction between Cluster I and Cluster III Rifampicin Resistant Mutations", J. Mol. Biol., Vol. 231, (1993), pp. 1-5
	AAI	David G. THANASSI, et al., "Role of Outer Membrane Barrier in Efflux-Mediated Tetracycline Resistance of *Escherichia coli*, Journal of Bacteriology, Vol. 177, No. 4, (Feb. 1995), pp. 998-1007
	AAJ	Jan SIKKEMA, et al., "Mechanisms of Membrane Toxicity of Hydrocarbons", Microbiological Reviews, Vol. 59, No. 2, (June 1995), pp. 201-222
	AAK	Maria-Isabel RAMOS-GONZALES, et al., "Physiological Characterization of *Pseudomonas putida* DOT-TIE Tolerance to *p*-Hydroxybenzoate", Applied and Environmental Microbiology, Vol. 67, No. 9, (Sept. 2001), pp. 4338-4341
	AAL	Jan ROELOP van der MEER, et al., "Molecular Mechanisms of Genetic Adaptation to Xenobiotic Compounds", Microbiological Reviews, Vol. 56, No. 4, pp. 677-694
	AAM	Kenneth N. TIMMIS, "Designing Microorganisms for the Treatment of Toxic Wastes", Annu. Rev. Microbiol, Vol. 48, (1994), pp. 525-557
	AAN	Frans J. WEBER, et al., "Adaptation of *Pseudomonas putida* S12 to High Concentrations of Styrene and Other Organic Solvents", Applied and Environmental Microbiology, Vol. 59, No. 10, (Oct. 1993), pp. 3502-3504
	AAO	B.J. WALLACE, et al., "Mechanism of Action of Antibacterial Agents", Vol. 5/Part 1, (1979), pp. 272-303
	AAP	Norberto J. PALLERONI, "The Prokaryotes, Second Edition", Vol. 3, pp. 3071-3085
	AAQ	Jeffery VIEIRA, et al., "Production o Single-Stranded Plasmid DNA", Methods in Enzymology, Vol. 153, (1987), pp. 3-11

Examiner	Date Considered

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	BAA	Ding Jun JIN, et al., "Mapping and Sequencing of Mutations in the *Escherichia coli rpoB* Gene that Lead to Rifampicin Resistance", J. Mol. Biol., Vol. 202, (1988), pp. 45-58
	BAB	Luca COMAI, et al., "A New Technique for Genetic Engineering of Agrobacterium Ti Plasmid", Plasmid, Vol. 10, (1983), pp. 21-30
	BAC	P. BUCKEL, et al. "Alteration of Ribosomal Protein L6 in Mutants of *Escherichia coli* Resistant to Gentamicin", Molec. Gen. Genet, Vol. 158, (1977), pp. 47-54
	BAD	K. OCHI, et al. "Molecular and functional analysis of the ribosomal L11 and S12 protein genes (*rplKI*) and (*rpsL*) of *Streptomyces coelicolor* A3(2)", Mol Gen Genet, Vol. 256, (1997), pp. 488-498
	BAE	J. XU, et al., "A rifampicin resistance mutation in the *rpoB* gene confers ppGpp-independent antibiotic production in *Streptomyces coelicolor* A3(2)",Mol Genet Genomics, Vol. 268, (2002), pp. 179-189.
	BAF	Keiichi HOSOKAWA, et al. "Regulation of Synthesis of Early Enzymes of *p*-Hydroxybenzoate Pathway in *Pseudomonas putida*", Vol. 245, No. 20, Issue of October 25, 1970, pp.5304-5308
	BAG	Jasper KIEBOOM, et al., "Identification and molecular characterization of an efflux system involved in *Pseudomonas putida* S12 multidrug resistance", Microbiology, Vol. 147, (2001), pp. 43-51
	BAH	The Journal of Antibiotics, "A Novel Method for Improving *Streptomyces coelicolor* A3(2) for Production of Actinorhodin by Introduction of *rpsL* (Encoding Ribosomal Protein S12) Mutations Conferring Resistance to Streptomycin", Vol. 50, No. 6, June 1997
	BAI	Marion FINKEN, et al., "Molecular basis of streptomycin resistance in *Mycobacterium tuberculosis*: alterations of the ribosomal protein S12 gene and point mutations within a functional 16S ribosomal RNA pseudoknot", Vol. 9, No. 6, (1993), pp. 1239-1246
	BAJ	Haifeng HU, et al., "Activation of Antibiotic Biosynthesis by Specified Mutations in the *rpoB* Gene (Encoding the RNA Polymerase β Subunit) of *Streptomyces lividans*", Journal of Bacteriology, Vol. 184, No. 14, (July 2002), pp. 3984-3991
	BAK	Takashi INAOKA, et al., "Construction of an In Vivo Nonsense Readthrough Assay System and Functional Analysis of Ribosomal Proteins S12, S4, and S5 in *Bacillus subtilis*", Journal of Bacteriology, Vol. 183, No. 17, (Sept. 2001), pp. 4958-4963
	BAL	Hiroshi NIKAIDO "Multidrug Effux Pumps of Gram-Negative Bacteria", Journal of Bacteriology, Vol. 178, No. 20, (Oct. 1996), pp. 5853-5859
	BAM	Haifeng HU, et al., "Novel Approach for Improving the Productivity of Antibiotic-Producing Strains by Inducing Combined Resistant Mutations", Applied and Environmental Microbiology, Vol. 67, No. 4, (Apr. 2001), pp. 1885-1892
	BAN	G. Rasul CHAUDHRY, et al., "Biodegradation of Halogenated Organic Compounds", Microbiological Reviews, Vol. 55, No. 1, (Mar. 1991), pp. 59-79
	BAO	M. A. KERTESZ, et al., "Desulfurization and desulfonation: applications of sulfur-controlled gene expression in bacteria", Appl. Microbiol Biotechnol, Vol. 57, (2001), pp. 460-466
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	BAQ	Eric CUNDLIFFE, "Recognition Sites for Antibiotics within rRNA", (1990), pp. 479-490

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	CAB	Teofila C. BEAMAN, et al., "Specificity and Control of Uptake of Purines and Other Compounds in *Bacillus subtilis*", Vol. 156, No. 3, (Dec. 1983), pp. 1107-1117
	CAB	David G. THANASSI, et al., "Role of Outer Membrane Barrier in Efflux-Mediated Tetracycline Resistance of *Escherichia coli*", Vol. 177, No. 4, (Feb. 1995), pp. 998-1007
	CAC	Kunihiko NISHINO, et al., "Analysis of a Complete Library of Putative Drug Transporter Genes in *Escherichia coli*", Vol. 183, No. 20, (Oct. 2001), pp. 5803-5812
	CAD	Jun SHIMA, et al., "Induction of Actinorhodin Production by *rpsL* (Encoding Ribosomal Protein S12) Mutations that Confer Streptomycin Resistance in *Streptomyces lividans and Streptomyces coelicolor* A3(2)", Journal of Bacteriology, Vol. 178, No. 24, (Dec. 1996), pp. 7276-7284
	CAE	Caroline S. HARWOOD, et al., "Identification of the *pcaRKF* Gene Cluster from *Pseudomonas putida*: Involvement in Chemotaxis, Biodegradation, and Transport of 4-Hydroxybenzoate", Journal of Bacteriology, Vol. 176, No. 21, (Nov. 1994), pp. 6474-6488
	CAF	Tomoyuki MINE, et al., "Expression in *Escherichia coli* of a New Multidrug Efflux Pump, MexXY, from *Pseudomonas aeruginosa*", Antimicrobial Agents and Chemotherapy, Vol. 43, No. 2, (Feb. 1999), pp. 415-417
	CAG	Rikizo AONO, et al., "Involvement of Outer Membrane Protein TolC, a Possible Member of the *mar-sox* Regulon, in Maintenance and Improvement of Organic Solvent Tolerance of *Escherichia coli* K-12", Journal of Bacteriology, Vol. 180, No. 4, (Feb. 1998), pp. 938-944
	CAH	Nadine HONORE, et al., "Streptomycin Resistance in Mycobacteria", Antimicrobial Agents and Chemotherapy, Vol. 38, No. 2, (Feb. 1994), pp. 238-242
	CAI	Juan L. RAMOS, et al., "Isolation and Expansion of the Catabolic Potential of a *Pseudomonas putida* Strain Able to Grow in the Presence of High Concentrations of Aromatic Hydrocarbons", Journal of Bacteriology, Vol. 177, No. 14, (July 1995), pp. 3911-3916
	CAJ	Julio Ramos AIRES, et al., "Involvement of an Active Efflux System in the Natural Resistance of *Pseudomonas aeruginosa* to Aminoglycosides", Antimicrobial Agents and Chemotherapy, Vol. 43, No. 11, (Nov. 1999), pp. 2624-2628
	CAK	David G. WHITE, et al., "Role of the *acrAB* Locus in Organic Solvent Tolerance Mediated by Expression of *marA, soxS, or robA* in *Escherichia coli*", Journal of Bacteriology, Vol. 179, No. 19, (Oct. 1997), pp. 6122-6126
	CAL	Antonia ROJAS, et al., "Three Efflux Pumps are Required to Provide Efficient Tolerance to Toluene in *Pseudomonas putida* DOT-T1E", Journal of Bacteriology, Vol. 183, No. 13, (July 2001), pp. 3967-3973
	CAM	Juan L. RAMOS, et al., "Efflux Pumps Involved in Toluene Tolerance in *Pseudomonas putida* DOT-T1E", Journal of Bacteriology, Vol. 180, No. 13, (July 1998), pp. 3323-3329
	CAN	Kwag KIM, et al., "Isolation and Characterization of Toluene-Sensitive Mutants from the Toluene-Resistant Bacterium *Pseudomonas putida* GM73", Journal of Bacteriology, Vol. 180, No. 14, (July 1998), pp. 3692-3696
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	CAP	Thomas A. WICHELHAUS, et al., "Molecular Characterization of *rpoB* Mutations Conferring Cross-Resistance to Rifamycins on Methicillin-Resistant *Staphylococcus aureus*", Antimicrobial Agents and Chemotherapy, Vol. 43, No. 11, (Nov. 1999), pp. 2813-2816
	CAQ	Albrecht MEIER, et al., "Genetic Alterations in Streptomycin-Resistant *Mycobacterium tuberculosis*: Mapping of Mutations Conferring Resistance", Antimicrobial Agents and Chemotherapy, Vol. 38, No. 2, (Feb. 1994), pp. 228-233

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	DAA	Yoshiko HOSOYA, et al., "Acquisition of Certain Streptomycin-Resistant (*str*) Mutations Enhances Antibiotic Production in Bacteria", Antimicrobial Agents and Chemotherapy, Vol. 42, No. 8, (Aug. 1998), pp. 2041-2047
	DAB	Markus HEEP, et al., "Rifampin and Rifabutin Resistance Mechanism in *Helicobacter pylori*", Antimicrobial Agents and Chemotherapy, Vol. 43, No. 6, (June 1999), pp. 1497-1499
	DAC	Jasper KIEBOOM, et al., "Active Efflux of Organic Solvents by *Pseudomonas putida* S12 Is Induced by Solvents", Journal of Bacteriology, Vol. 180, No. 24, (Dec. 1998), pp. 6769-6772
	DAD	Keiichi HOSOKAWA, et al., "Streptomycin-resistant (*rpsL*I) or rifampicin-resistant (*rpoB*) mutation in *Pseudomonas putida* KH146-2 confers enhanced tolerance to organic chemicals", Environmental Microbiology (2002) 4(11), pp.703-712
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